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10/521,911

09/19/2005

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EXAMINER

BINDA, GREGORY JOHN

ART UNIT

PAPER NUMBER

3679

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/521,911 | Applicant(s) BARTLETT, STEPHEN CHARLES | |
| | Examiner Greg Binda | Art Unit 3679 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2008 and 20 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-62 is/are pending in the application.
- 4a) Of the above claim(s) 27-32,37,38,42-44 and 46-62 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33-35,39-41 and 45 is/are rejected.
- 7) ☒ Claim(s) 36 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2008 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Election/Restrictions

2. Claims 27-32, 37, 38, 42-44 & 46-62 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election of the flexible coupling shown in Fig. 2 (Species II) was made **without** traverse in the reply filed on June 27, 2007.

Drawings

3. The replacement drawings filed October 27, 2008 are objected to because Fig. 1B fails to include reference character 24a. See page 5, lines 14-16.

4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

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application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The disclosure is objected to because:
 - a. The brief description refers to Figs. 1A & 1B only as Fig. 1. See MPEP § 608.01(f).
 - b. At page 5, line 26, the term “heads 27” should be changed to “heads 26”.

Claim Rejections - 35 USC § 102

6. Claims 33-35, 39, 40 & 45 are rejected under 35 U.S.C. 102(b) as being anticipated by Landon et al, US 3,296,827 (Landon). Landon shows a flexible coupling 14 (see col. 1, line 35 and col. 3, lines 36 & 37) capable of transmitting torque and comprising:

a first member 17 having a rotary axis and comprising at least three pins 30 (see also “threading into . . . hubs 17 and 18);

a second member 21, 27 (see also col. 2, lines 8 & 9) comprising at least six sockets 27;
and

a third member 18 having a rotary axis and comprising at least three pins 30,
wherein the first member is connected to the second member by at least three joints and the second member is connected to the third member by at least three joints, the joints being

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circumferentially spaced (see also col. 2, lines 17-20) about said axes, wherein each joint comprises a pin 30 carried by the first or third member and a socket 27 carried by the second member, the pin registering into the socket so that torque can be transmitted between the respective joint members and so that relative sliding and rotational movement can take place between each pin and associated socket,

wherein the sockets of the second member are connected by flexible extensions (see also “a series of rectilinear resilient and compressible columns” at col. 2, lines 33 & 34) to each other such that the first and third members can articulate relative to one another.

Figs. 1-3 shows the sockets 27 are mounted on a ring 21 and interconnected by flexible elements (see also “a series of rectilinear resilient and compressible columns” at col. 2, lines 33 & 34).

Figs. 2 & 3 shows the sockets are formed by inserts 27 received in bores in the ring 21, the bores being flexibly interconnected.

Figs. 1 & 3 show the pins 30 have cylindrical surfaces which engage with cylindrical bores (“an aperture” at col. 2, line 4).

Fig. 1 shows the first and third members 17 & 18 comprise outwardly projecting pins 30 received in alternate sockets 27 on the ring 21.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Landon in view of Ciotola, US 6,325,722. In Fig. 2, Landon shows cylindrical bores (nominally indicated by reference numeral 33) on the sockets 27, but does not expressly disclose part-spherical heads on the pins 30. In Fig. 4, Ciotola shows part-spherical heads 23 on pins 18. At col. 5, lines 21-25, Ciotola teaches providing the pins with part-spherical heads in order to provide a great degree of tolerable flexibility. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the flexible coupling of Landon by making the pins with part-spherical heads in order to provide a great degree of tolerable flexibility as taught by Ciotola.

Allowable Subject Matter

9. Claim 36 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

10. Applicant's arguments filed October 27, 2008 have been fully considered but they are not persuasive.

a. Applicant argues Landon fails to show the pins as a portion of the first and third members. However, at col. 2, lines 4-6, Landon disclose the pins 30 are fixed on the first and third members 17 & 18.

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b. Applicant argues Landon fails to show the sockets positioned on the second member. However, at col. 2, lines 8, 9 & 46+, Landon discloses the sockets 27 are positioned on the ring 21 of the second member.

c. Applicant argues Landon fails to show the second member having sockets separated by flexible extensions. However, Fig. 3 shows each socket is separated by flexible extensions (indicated by referenced characters 40L, 40R).

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (571) 272-7077. The examiner can normally be reached on M-F 10:30 am to 8:00 pm with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Greg Binda/
Primary Examiner, Art Unit 3679